FINDING OF NO SIGNIFICANT IMPACT NEW YORK CANYON GEOTHERMAL EXPLORATION PROJECT ENVIRONMENTAL ASSESSMENT DOI-BLM-NV-W010-2010-0004-EA

Based on the Environmental Assessment (EA) DOI-BLM-NV-W010-2010-0004-EA, dated October 2010, and after consideration of the environmental effects and recommended mitigation and monitoring, as disclosed in Chapters 4 & 6 of the EA, I have determined that the decision to allow Terra-Gen Power Dixie Development, LLC (TGP) to proceed with the Operations Plan and geothermal exploration drilling, as analyzed under the Proposed Action, will not significantly affect the quality of the human environment and natural resources and that an Environmental Impact Statement (EIS) is not required to be prepared. Contingent upon the implementation of the attached Conditions of Approval (COAs), the setting of the project and the expected project effects do not have significance at a local, regional, state or national level.

I have determined that the Operations Plan and geothermal exploration drilling are in conformance with the approved Sonoma-Gerlach Management Framework Plan and are consistent to the maximum extent possible by Federal law with the plans and policies of neighboring local, county, state, and federal agencies and governments. This finding and conclusion is based on my consideration of the Council on Environmental Quality's (CEQ) criteria for significance (40 CFR 1508.27), both with regard to the context and the intensity of impacts described in the EA.

Context

TGP proposes to conduct geothermal exploration operations in the New York Canyon Geothermal Lease Area located approximately 25 miles east-southeast of Lovelock, Nevada in Pershing and Churchill Counties. The Lease Area is located on the west side of the Stillwater Range and consists of 7 federal geothermal leases for approximately 15,971 acres. The Project Area is a portion of the Lease Area and is currently proposed to be encompassed within 3 separate polygons for approximately 2,316 acres. The Proposed Action includes the drilling of up to 15 exploration wells, 1 temporary water well, the construction of on-lease access roads and well pads, surface pipelines and associated ancillary facilities (including a man-camp) for the purpose of geothermal exploration. Total acreage proposed for disturbance within the Project Area is estimated to be 81.8 acres.

Intensity

1) Impacts that may be both beneficial and adverse.

The environmental assessment has considered both beneficial and adverse impacts of geothermal resource exploration in the New York Canyon vicinity. Concerns related to Native American Religious Concerns and Cultural Resources arose through analysis and consultation; however, mitigation measures have been developed and brought forth as COAs to offset potential adverse impacts and minimize overall impacts. Ultimately, the project would result in short-term, temporary environmental impacts and result in beneficial economic and energy resource effects.

- 2) The degree to which the Proposed Action affects public health or safety. The Proposed Action would not adversely affect public health or safety.
- 3) Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas.

Historic and cultural resources are identified and described in the EA (3.3 Cultural Resources and 3.6 Native American Religious Concerns). There are six traditional cultural properties (TCPs) in the vicinity of the proposed Project Area including one, the Dave Canyon TCP, which is listed on the National Register of Historical Places (NRHP). The other TCPs have not been evaluated for the NRHP and, therefore, must be treated as eligible until they are evaluated. The above TCPs are associated with the pine nut harvest and other ceremonies and rites. In addition, one traditional route, CrNV-02-9577, passes through the proposed Project Area. Another traditional route, CrNV-02-9535, falls just outside the project boundary.

Visual simulations were created specifically for this project and depict drill pads and associated geothermal exploration facilities in the southern leases. The simulations indicate that there will be visual impacts; however, the simulations also suggest that impacts will be minimized if reclamation is begun as soon as possible. The BLM and the Nevada State Historic Preservation Office (SHPO) have agreed that the mitigation measures listed in chapters 4 and 6 would be sufficient to mitigate the adverse effects to the Dave Canyon TCP, other TCPs in the vicinity of the Project Area, and the two traditional access routes (CrNV-02-9535 and CrNV-02-9577) from the Proposed Action. With these mitigation measures being brought forth as COAs, the adverse effects should be limited to short-term, temporary impacts. No long-term impacts are anticipated.

4) The degree to which the effects on the quality of the human environment are likely to be highly controversial.

The effect on the quality of the human environment from development of geothermal fluid resources is well known and documented in northern Nevada and specifically within the jurisdiction of the Humboldt River Field Office. Comment letters were received from TGP, coordinating state agencies and an interested environmental group and were in favor of the development of renewable energy and in support of the mitigation measures developed in the analysis process.

Native American Consultation has been continuous through the evaluation of this project. The Fallon tribal government is opposed to situating geothermal operations and a possible future geothermal power plant in the southern Buena Vista Valley. However, they acknowledge that geothermal drilling in the southern Buena Vista Valley would have short-term, temporary impacts if all mitigation measures described in the EA are implemented as COAs. The Dave Canyon TCP users are opposed to geothermal operations in the vicinity of the Dave Canyon TCP. They acknowledge that if the mitigation measures described in the EA are implemented there should only be short-term, temporary impacts to the Dave Canyon TCP.

5) The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks.

The Proposed Action is not unique or unusual. The development of geothermal resources for the production of electricity is specifically regulated and follows accepted standard operating procedures and best management practices. The BLM has previous experience implementing similar actions in similar areas and have found the effects to be reasonably predictable. There are no known effects of the Proposed Action identified in the EA which are considered uncertain or involve unique or unknown risks. While this is the case, human use of the area will continue to be investigated through the course of the Proposed Action.

- 6) The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration. There is potential that this action may establish a precedent or represent a decision in principle for future actions with regard to geothermal operations near TCPs.
- 7) Whether the action is related to other actions with individually insignificant but cumulatively significant impacts.

Based on the EA, no significant cumulative impacts are expected. The Proposed Action, when evaluated together with other past, present, or reasonably foreseeable land disturbing activities in the area, would not result in cumulatively significant impacts at the local or watershed basin scale.

TGP has made it clear that if the geothermal resource exists, they will propose building a geothermal power plant in their lease area. The impacts and intensity of impacts associated with geothermal development in this area have not been evaluated and cannot be evaluated until an utilization plan is submitted. Impacts would vary depending on the type and location of activity proposed.

8) The degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the NRHP or may cause loss or destruction of significant scientific, cultural, or historical resources.

The BLM and the Nevada SHPO have agreed that the mitigation measures listed in chapters 4 and 6 would be sufficient to mitigate the adverse effects to the Dave Canyon TCP, other TCPs in the vicinity of the Project Area, and the two traditional access routes (CrNV-02-9535 and CrNV-02-9577) from the Proposed Action. If these mitigation measures are brought forth and implemented as COAs, the adverse effects should be limited to short-term, temporary impacts. No long-term impacts are anticipated. The proposal should not adversely affect districts, sites, highways, structures, or other objects currently listed or eligible for listing, nor should it cause loss or destruction of significant scientific, cultural or historical resources.

9) The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the ESA of 1973.

There would be no significant adverse impacts to threatened, endangered, or Nevada State sensitive species or associated habitat within the assessment areas. Based on the EA and implementation of mitigation, no significant or adverse impacts would result to these species from implementing the Proposed Action. The U.S. Fish and Wildlife

Service was consulted and the National Heritage Program database was researched in the development of this EA.

10) Whether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment.

The Proposed Action does not violate or threaten any known Federal, State, or local law or requirement imposed for the protection of the environment.

Michael Truden Field Manager

Humboldt River Field Office

Date